SECTION – B
SHORT QUESTION

Q-02: List all the relations on the set (0,1). How many of them contains the pair (0,1)?

Q-03: if $x = \sqrt{5} - 2$ then find the value of $x^4 + \frac{1}{x^4}$

Q-04: Find the logarithms of 16 to the base $2\sqrt{2}$.

Q-05: If $x - y = 2\sqrt{2}$, then prove that : $x^3 - y^3 - 6\sqrt{2}xy = 16\sqrt{2}$.

Q-06: For what values of p and q, $x^4 + 4x^3 + 10x^2 + px + q$ will be perfect squar.

Q-07: Solve any one of the following equation.

(i) $\frac{2x-3}{5} = \frac{x-2}{2}$ (ii) $\sqrt{2y-3} = \sqrt{3y+4}$

Q-08: Eliminate "x" from the equations:

$x + \frac{1}{x} = 2p$, $x = \frac{1}{x} = 2q + 1$

Q-09: if a:b :: c:d, then show that $\frac{a^2 - c^2}{ac} = \frac{b^2 - d^2}{bd}$

Q-10: Solve ΔABC when $\angle C = 90°$, $m\angle B = 60°$ and a = 2cm.

Q-11: Calculate the arithmetic mean when $D = x - 100$, $\sum fD = 400$ and $\sum f = 50$.

Q-12: If two angles of a triangle are congruent, the side opposite to them are also congruent. Prove it.

Q-13: If a line is drawn perpendicular to a radial segment of a circle at its outer end point, it is tangent to the circle at that end point. Prove it.

Q-14: Solve the equations by using cramer's rule:

$-72x + y = 6$, $26x + 18y = 2$

Q-15: Define any TWO of the following terms and draw the figures.

(i) Vertically Opposite Angles (ii) Alternate Angles

(iii) Inscribed Angles of an Arc